(06/01/2021)

The Tail-Doppler Radar (TDR) dataset is comprised of raw Doppler radar data (as recorded on the aircraft) and products derived therefrom for a given flight.

Note: YYYY = 4-digit year; YY = 2-digit year; MM = 2-digit month; DD = 2-digit day; A = aircraft ID (N42/3/9=H/I/N); I = first (=1) or second (=2) flight of day for given aircraft starting 00 UTC; HHMMSS = UTC analysis time in hrs (HH), min (MM) and sec (SS); HHMM = UTC analysis time without sec; HHMM_HHMM = UTC analysis period (start_end)

Note: For flights crossing 00 UTC, times are reported on a 48-h clock

Level 1a – **Raw TDR radials** with standard real-time QC written to individual 360° sweep files. Flight archives for fore- (*-MA-product_raw.tar.gz) and aft-pointing (*-SL-product_raw.tar.gz) antenna are located at

https://seb.noaa.gov/pub/acdata/YYYY/RADAR/YYYYMMDDAI

Level 1b – **Real-time TDR products** generated on the aircraft using automated QC and synthesis methods, transmitted to a ground server, and archived *as is*. Flight archives are located at

https://seb.noaa.gov/pub/flight/hrd/radar/YYYYMMDDAI

<Execution, O(1M)> Informational text output/error files produced during software execution

YYMMDDAI HHMM HHMM analysis.tar

<Analysis, O(10M)> 3D wind/reflectivity, 2D vertical profile gridded analyses of QC'd TDR data

YYMMDDAI HHMM xy.(w)nc.gz

YYMMDDAI HHMM xy rel.(w)nc.gz

YYMMDDAI_HHMM_vert_in(out)bound.(w)nc.gz

YYMMDDAI_HHMM_vert_in(out)bound_rel.(w)nc.gz

YYMMDDAI_HHMM_vert_in(out)bound_fall.(w)nc.gz

<AWIPS, O(1M)> Wind and reflectivity products for AWIPS-2 ingest derived from analysis data

AWIPSMaxdb_YYMMDDAI_HHMMz.nc.gz

AWIPSWindComponents_YYMMDDAI_HHMMz.nc.gz

<Superob, O(1M)> QC'd TDR data averaged to regular azimuth/radius points about flight track

YYMMDDAI_HHMM_HHMM_radials.so.gz

Level 1b - Real-time TDR graphics generated during flights and archived at

ftp://ftp.aoml.noaa.gov/pub/hrd/data/RTradar/YYYYMMDDAI

Level 2 – **Post-processed TDR products** generated on the ground after the end of hurricane season using automated QC and synthesis methods. Departures in method from that used in real time (Level 1b) are noted in a separate document available by request. Each analysis has been inspected and adheres to basic standards for research use. Flight archives are located at

ftp://ftp.aoml.noaa.gov/pub/hrd/data/radar/level2

<Jobfile, 3K> Input parameters to the automated QC/synthesis software

YYYYMMDDAI_HHMMSS_jobfile.tar.gz

<Execution, O(1M)> Informational text output/error files produced during software execution

YYMMDDAI_HHMM_HHMM_analysis.tar

<Analysis, O(10M)> 3D wind/reflectivity, 2D vertical profile gridded analyses of QC'd TDR data

YYMMDDAI_HHMM_xy.(w)nc.gz

YYMMDDAI_HHMM_xy_rel.(w)nc.gz

YYMMDDAI HHMM vert in(out)bound.(w)nc.gz

YYMMDDAI_HHMM_vert_in(out)bound_rel.(w)nc.gz

YYMMDDAI_HHMM_vert_in(out)bound_fall.(w)nc.gz

<AWIPS, O(1M)> Wind and reflectivity products for AWIPS-2 ingest derived from analysis data

AWIPSMaxdb_YYMMDDAI_HHMMz.nc.gz

 $AWIPSWindComponents_YYMMDDAI_HHMMz.nc.gz$

<Superob, O(1M)> QC'd TDR data averaged to regular azimuth/radius points about flight track

YYMMDDAI_HHMM_HHMM_radials.so.gz